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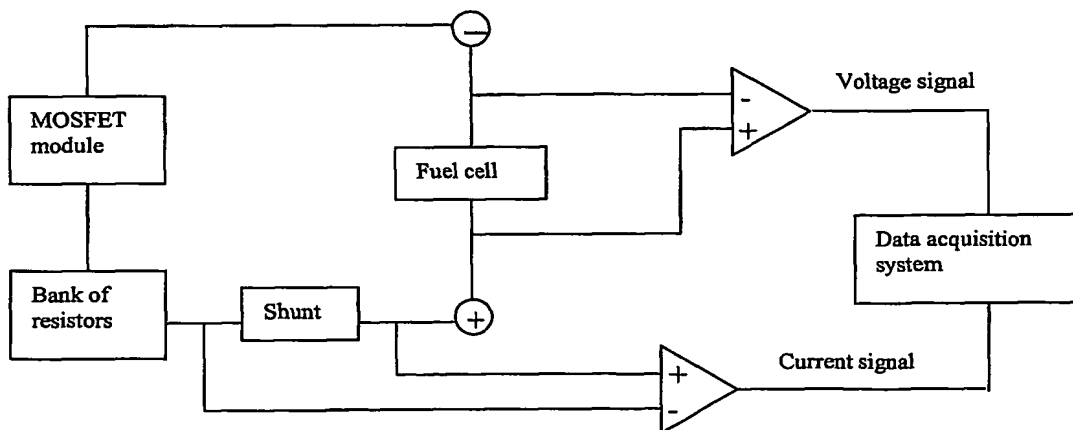
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(54) Title: APPARATUS AND METHOD FOR FUEL CELL RESISTANCE TEST

**Measurement circuit**



(57) Abstract: The present invention relates to a system applied for the measurement of the total ohmic internal resistance of fuel cells and stack of fuel cells. The apparatus comprises an electronic load system which comprises: an input unit generating an input pulse, a driver for the control of the input pulse, a MOSFET module comprising at least one MOSFET device for the generation of a short circuit in a fuel cell, a bank of selectable resistors and a measuring circuit which comprises: a shunt for converting the fuel cell current into a voltage signal, differential amplifiers for the current and the voltage signals and a data acquisition system which receives the voltage and the current signals obtained by the differential amplifiers.